

SEMICONDUCTOR DEVICE FOR DETECTING AND ADJUSTING A THRESHOLD VALUE VARIATION

Abstract

The present invention generally relates to a semiconductor device and more specifically to a semiconductor device for detecting and adjusting threshold voltage variations of an integrated semiconductor device implemented in sub-micron technology, i.e. transistors, and a method related thereto. To adjust the threshold voltage variation induced by the fabrication process in the semiconductor a comparison between a device under test and a fixed voltage value is provided. According to the invention, a constant current is injected in the transistor and the gate-to-source potential is fixed by a bias voltage. According to the comparison result, a well potential is provided to the semiconductor device to adjust the threshold voltage.